REMARKS

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 5,685,156 to Willis et al. in view of U.S. Patent No. 4,619,588 to Moore and in further view of U.S. Patent No. 5,180,034 to Lopes. The remaining claims, claims 6-14, are allowed.

In response, claims 1-5 have been canceled and claims 6, 9, 10, and 12 have been amended.

New claim 15 includes all of the limitations of original claim 1 (with the exception that the combustor is an annular combustor) and further requires an electric motor coupled to a fuel pump and the lubricating oil pump wherein the fuel pump and the lubricating oil pump are driven by an electric motor. Claim 16 is original claim 2 and depends from claim 15. Claim 17 is original claim 3 and depends from claim 16. Claim 18 is original claim 5 and depends from claim 16.

It is believed that new claim 15 is patentable over the prior art of record for the following reasons. Claim 15 claims an electricity generating system that requires a body, a turbine made of a plurality of turbine blades secured to a rotor, a compressor chamber, a plurality of compressor blades, an air inlet port, an exit port, a plurality of magnets, a stator, a fuel pump, a bearing rotatably supporting the rotor and a lubricating oil pump. An electric motor is coupled to both the fuel pump and the lubricating oil pump. Hence, the fuel pump and the lubricating oil pump are driven by the same motor.

Nowhere does the Willis patent, Moore patent, and/or Lopes patent teach or suggest a motor driving both the fuel pump and the lubricating oil pump. The purpose of this arrangement is described in the specification at page 9, lines 18-33, which states:

> An advantage of the present oil pump/fuel pump motor arrangement is that if the lubricating oil pump 50 fails (which typically means that the inner rotor 82 becomes jammed and cannot rotate about the longitudinal axis 81), the electric motor 52 will stall, thereby preventing

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the drive shafts 78 and 80 from rotating. Also, if the electric motor or fuel pump fails, there will be a safe shutdown. This causes the system to "shut down" because no fuel will be supplied to the annular combustor 14 by the fuel pump 36 which is driven by the electric motor shafts 78 and 80. Hence, damage to the system components is prevented due to an inadequate supply of lubricating oil to the rotating system parts. The lubricating oil pump 50 and/or electric motor 52 must be repaired before fuel can be supplied to the annular combustor 14.

Hence, it is believed that claim 15 is patentable over the prior art of record.

Claims 16-18 depend from claim 15 either directly or indirectly and they are believed to be patentable for at least the same reasons claim 15 is patentable.

Independent claims 6, 9, 10, and 12 have been amended to delete the requirement that the combustor be an annular combustor. It is believed that these claims are still patentable over the prior art of record. No new matter has been added. Claims 7 and 8 depend from claim 6 and are believed to be allowable for at least the same reasons claim 6 is allowable. Claims 11 and 14 depend from claim 10 and is believed to be allowable for at least the same reasons claim 10 is allowable. Claim 13 depends from claim 12 and is believed to be allowable for at least the same reason claim 12 is allowable.

New claim 19 depends from claim 15 and requires the combustor to be an annular combustor. New claims 20-23 depend from claims 6, 9, 10, and 12, respectively, and require the combustor to be an annular combustor. No new matter has been added.

In view of the foregoing, it is believed that pending claims 6-23 are patentable over the prior art of record.

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Also submitted concurrently herewith is an Information Disclosure Statement which identifies additional prior art which was cited in the corresponding European Search Report. It is believed that the claims are patentable over the cited prior art. Reconsideration of the rejections is respectfully requested.

Respectfully submitted,
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MARKED UP AMENDED CLAIMS

6. (Amended) An electricity generating system, comprising:

a body;

[an annular] a combustor provided in said body;

a turbine made of a plurality of turbine blades secured to a rotor, provided in said body and in fluid communication with said combustor;

a compressor chamber provided in said body and in fluid communication with said combustor;

a plurality of compressor blades secured to said rotor, said compressor blades positioned within a compressor chamber;

an air inlet port in fluid communication with said compressor chamber;

an exit port in fluid communication with said turbine;

a plurality of magnets secured to said rotor; and

a stator made of a magnetically attracted material provided in said body, said stator positioned in close proximity to said plurality of magnets whereby rotation of said rotor causes a change in flux about said stator thereby generating electricity; and

a fuel metering valve in fluid communication with said [annular] combustor, wherein said fuel metering valve comprises a proportional solenoid having a plunger having a tip, said plunger adapted to extend along a longitudinal axis, a valve body defining a plunger cavity, an inlet and an outlet, said plunger extending within said plunger cavity, and a flow plate having a hole defined therein, said flow plate secured to said valve body and positioned within said plunger cavity between said inlet and said outlet whereby movement of said plunger in a first longitudinal direction causes said tip to coact with the hole defined in said flow plate to vary a flow from said inlet to said outlet through said hole defined in said hole plate.

9. (Amended) An electricity generating system, comprising:

a body;

[an annular] a combustor provided in said body;

a turbine made of a plurality of turbine blades secured to a rotor, provided in said body and in fluid communication with said combustor;

a compressor chamber provided in said body and in fluid communication with said combustor;

a plurality of compressor blades secured to said rotor, said compressor blades positioned within a compressor chamber;

an air inlet port in fluid communication with said compressor chamber;

an exit port in fluid communication with said turbine;

a plurality of magnets secured to said rotor;

a stator made of a magnetically attracted material provided in said body, said stator positioned in close proximity to said plurality of magnets whereby rotation of said rotor causes a change in flux about said stator thereby generating electricity; and

a fuel metering valve fluidly coupled to said [annular] combustor, wherein said fuel metering valve comprises a proportional solenoid having a plunger that is adapted to extend along a longitudinal axis, said plunger having a tip, and a valve body defining a plunger cavity, an inlet and an outlet, said plunger extending within said plunger cavity, said tip having a blocking portion and a flow passageway defined therein having an inlet port and an outlet port, wherein said inlet port is in fluid communication with said outlet port whereby movement of said tip in a first longitudinal direction causes said inlet port, outlet port and blocking member to coact with said inlet and outlet to vary a flow through said valve body from said inlet to said outlet.

10. (Amended) An electricity generating system, comprising:

a body;

[an annular] a combustor provided in said body;

a turbine made of a plurality of turbine blades secured to a rotor, provided in said body and in fluid communication with said combustor;

a compressor chamber provided in said body and in fluid communication with said combustor;

a plurality of compressor blades secured to said rotor, said compressor blades positioned within a compressor chamber;

an air inlet port in fluid communication with said compressor chamber;

an exit port in fluid communication with said turbine;

a plurality of magnets secured to said rotor;

a stator made of a magnetically attracted material provided in said body, said stator positioned in close proximity to said plurality of magnets whereby rotation of said rotor causes a change in flux about said stator thereby generating electricity;

an annular-shaped bearing rotatably receiving a cylindrical portion of said rotor through an annulus defined in said bearing, said bearing secured to said body, said bearing adapted to support said rotor so that said rotor can rotate about a longitudinal axis; and

a locking arrangement for securing said bearing to said body, said locking arrangement, comprising a lug secured to said bearing and extending in a radial direction away from the annulus, a cylindrical bearing receiving hole defined in the body to receive said bearing and a lug receiving recess defined in said body for receiving said lug and prevent said bearing from rotating about the longitudinal axis relative to said body, and a locking

member coacting with said bearing for limiting movement of said bearing in a first longitudinal direction relative to said body.

12. (Amended) An electricity generating system, comprising:

a body;

[an annular] a combustor provided in said body;

a turbine made of a plurality of turbine blades secured to a rotor, provided in said body and in fluid communication with said combustor;

a compressor chamber provided in said body and in fluid communication with said combustor;

a plurality of compressor blades secured to said rotor, said compressor blades positioned within a compressor chamber;

an air inlet port in fluid communication with said compressor chamber;

an exit port in fluid communication with said turbine;

a plurality of magnets secured to said rotor;

a stator made of a magnetically attracted material provided in said body, said stator positioned in close proximity to said plurality of magnets whereby rotation of said rotor causes a change in flux about said stator thereby generating electricity;

an annular-shaped bearing rotatably receiving a cylindrical portion of said rotor through an annulus defined in said bearing, said bearing secured to said body, said bearing adapted to support said rotor so that said rotor can rotate about a longitudinal axis; and

a damper positioned between an outer surface of said bearing and said body.

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